Internal structure and parts list
Standard (double acting)/O (normally open) type
C (normally closed) type


* Spring of $\boldsymbol{\top}$ is not contained in standard (double acting) type.

| No. | Parts name | Material | Remarks | No. | Parts name | Material | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Bearing | Steel |  | 11 | Pinion gear | Steel |  |
| 2 | Guide rod | Alloy steel |  | 12 | Body | Aluminum alloy |  |
| 3 | Rod packing seal | Nitrile rubber |  | 13 | Piston A | Stainless steel |  |
| 4 | Cylinder gasket | Nitrile rubber |  | 14 | Piston B | Stainless steel (4 to 7CS) Acetar resin (3.5CS) |  |
| 5 | Piston packing seal | Nitrile rubber |  | 15 | Cylinder | Aluminum alloy |  |
| 6 | Magnet |  |  | 16 | Cylinder guard | Aluminum alloy |  |
| 7 | Spring | Steel | Only O type | 17 | Spring | Stainless steel |  |
| 8 | Master key | Steel |  | 18 | Piston | Stainless steel |  |
| 9 | Center guard | Steel |  | 19 | Cylinder | Aluminum alloy |  |
| 10 | Side cover | Aluminum alloy |  |  |  |  |  |

Gripping power performance data

Gripping power that functions to open and closed

## - HEP-3.5CS

 pressure $0.3,0.5$ and 0.7 MPa is- Open direction (b) - - - (shown with broken line)
- Closed direction ( $\quad$ ) (shown with continuous line)


HEP-5CS


- HEP-6CS




## HEP-4CS



- HEP-7CS

(Note) O type gripping power decreases approximate 20 to $30 \%$ comparing to double acting type to closed direction.
C type gripping power decreases approximate 10 to $20 \%$ comparing to double acting type to open direction.
Grip performance data indicates the grip for one jaw. Since two jaws are used, double the grip in the graph when making a selection.

